

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-6 (canceled)

7. (currently amended) An isolated polynucleotide encoding a τ subunit or a γ subunit of a DNA polymerase III-type enzyme of a *Thermus* bacterium, the encoded τ subunit or γ subunit comprising a GXXGXGKT (SEQ ID NO: 17) ATP-binding motif and the encoded τ subunit possessing DNA stimulated ATPase activity, wherein said isolated polynucleotide is at least 90 percent identical to the nucleotide sequence of SEQ ID NO: 3.

8-21 (canceled)

22. (previously presented) A vector comprising a polynucleotide according to claim 7.

23-27 (canceled)

28. (previously presented) A host cell comprising the vector according to Claim 22.

29. (original) The host cell according to Claim 28, wherein the host cell is a prokaryotic cell.

30-80 (canceled)

81. (previously presented) The isolated polynucleotide according to claim 7, wherein the polynucleotide is at least 95 percent identical to the nucleotide sequence of SEQ ID NO: 3.

82. (cancelled)

83. (previously presented) The isolated polynucleotide according to claim 7, wherein the amino acid sequence encoded by the polynucleotide is at least 90 percent identical to the amino acid residue sequence of SEQ ID NO:2.

84. (previously presented) The isolated polynucleotide according to claim 7, wherein the amino acid sequence encoded by the polynucleotide is at least 95 percent identical to the amino acid residue sequence of SEQ ID NO:2.

85. (previously presented) The isolated polynucleotide according to claim 7, wherein the amino acid sequence encoded by the polynucleotide is at least 90 percent identical to the amino acid residue sequence of SEQ ID NO:4.

86. (previously presented) The isolated polynucleotide according to claim 7, wherein the amino acid sequence encoded by the polynucleotide is at least 95 percent identical to the amino acid residue sequence of SEQ ID NO:4.

87. (cancelled)

88. (previously presented) The isolated polynucleotide according to claim 7, wherein the amino acid sequence encoded by the polynucleotide is at least 90 percent identical to the amino acid residue sequence of SEQ ID NO:5.

89. (previously presented) The isolated polynucleotide according to claim 7, wherein the amino acid sequence encoded by the polynucleotide is at least 95 percent identical to the amino acid residue sequence of SEQ ID NO:5.

90. (cancelled)

91. (previously presented) An isolated polynucleotide encoding a τ subunit or a γ subunit of a DNA polymerase III-type enzyme of a thermophilic bacterium, wherein the polynucleotide comprises a nucleotide sequence that encodes the amino acid sequence of SEQ ID NO: 2, the amino acid sequence of SEQ ID NO: 4, or the amino acid sequence of SEQ ID NO: 5.

92. (previously presented) The polynucleotide according to claim 91, wherein the polynucleotide comprises a nucleotide sequence that encodes the amino acid sequence of SEQ ID NO: 2.

93. (previously presented) The polynucleotide according to claim 91, wherein the polynucleotide comprises a nucleotide sequence that encodes the amino acid sequence of SEQ ID NO: 4.

94. (previously presented) The polynucleotide according to claim 91, wherein the polynucleotide comprises a nucleotide sequence that encodes the amino acid sequence of SEQ ID NO: 5.

95. (previously presented) The polynucleotide according to claim 91, wherein the polynucleotide comprises the nucleotide sequence of SEQ ID NO: 3.

96. (previously presented) A vector comprising a polynucleotide according to claim 91.

97. (previously presented) A host cell comprising the vector according to claim 96.

98. (previously presented) The host cell according to claim 97, wherein the host cell is a prokaryotic cell.